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10/763,345

01/23/2004

Andrew L. Van Brocklin

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EXAMINER

NGUYEN, DAO H

ART UNIT

PAPER NUMBER

2818

MAIL DATE

DELIVERY MODE

11/13/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/763,345

Applicant(s)

VAN BROCKLIN ET AL.

Examiner

Dao H. Nguyen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 29-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-16 is/are allowed.
- 6) ☒ Claim(s) 29-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In response to the communications dated 09/27/2007, claims 1-16 and 29-36 are active in this application.

Claim(s) 17-28 have been cancelled.

Remarks

2. Applicant's arguments, filed 09/27/2007, have been fully considered, but are not agreed.

Specifically, with regard to claim 29, Applicant argued that the relative position with a gap therebetween, as recited in claim 29, is corresponding to **the rest position** which occurs when **no voltage is applied** and corresponds to a specific gap between the first and the second plates (page 10, second paragraph). However, nowhere in claim 29 recites such features. That is, nowhere in claim 29 recites that the relative position with a gap therebetween is corresponding to **the rest position** which occurs when **no voltage is applied**. Nowhere in claim 29 recites "the rest position" nor "no voltage is applied" features. Applicant is reminded that arguments relating to limitation(s) or feature(s) not included in the claim would not be considered having any patentable weight.

With regard to claim 30, it is noted that the desired gap value is finally achieved only when the second voltage difference is settled. When the voltage is still in its

reducing or changing process, the gap between the plates is also changing correspondingly with the value of the voltage difference. Apparently, the desired gap value between the plates can be reached only after the voltage difference is reduced to the second voltage difference.

With regard to claim 34, again, arguments relating to limitation(s) or feature(s) not included in the claim would not be considered having any patentable weight.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claim(s) 29-36 are rejected under 35 U. S. C. § 102 (b) as being anticipated by U.S. Patent No. 6,140,737 to Boie.

Regarding claim 29, Boie discloses a method of operating a micro-electromechanical device 10, shown in figs. 1, 2, comprising first and second plates 12

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that are capable of relative movement and biased to a relative position with a gap therebetween, said method comprising:

applying a voltage difference (corresponding to the activated position; col. 2, lines 8-31; or a charge differential corresponding to the difference of the first voltage potential and the second voltage potential; col. 4, lines 61-65) to said two plates 12, said voltage creating an attractive force against said bias that narrows said gap between said two plates, wherein said voltage difference is greater than a second voltage difference corresponding to a desired gap value (corresponding to the rest position; col. 2, lines 8-31), said voltage difference higher than said second voltage difference being applied to accelerate relative movement between said two plates to said desired gap value; and,

after applying said voltage difference (activated voltage), reducing said voltage difference between said two plates to said second voltage difference (voltage at rest position) corresponding to said desired gap value (at rest position) less than a gap value corresponding to said relative position (at activated position).

Regarding claim 30, Boie disclose the method further comprising reducing said voltage difference between said two plates 12 to said second voltage difference before movement between said two plates reaches said desired gap value. See col. 2, lines 8-31, col. 4, lines 61-65.

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Regarding claim 31, Boie discloses the method wherein said second plate is fixed and said first plate moves relative to said second plate. See col. 2, lines 8-12.

Regarding claim 32, Boie discloses the method further comprising:

charging a node 20 electrically disconnected from said two plates 12 prior to applying said voltage difference; and

electrically connecting said node 12 with at least one of said plates to apply said voltage difference. See col. 3, line 15 to col. 4, line 36.

Regarding claim 33, Boie discloses the method further comprising electrically isolating said two plates after applying said voltage difference by opening a switch between said node and at least one of said plates. See col. 3, line 15 to col. 4, line 36. Note that it is easy to turn the voltage source 20 on/off.

Regarding claims 34-36, Boie discloses the method comprising all claimed limitations. See cols. 2-4.

Allowance

5. **Claims 1-16 are allowed.**

Conclusion

6. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

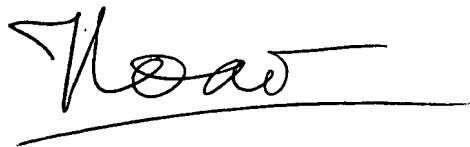
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dao Nguyen whose telephone number is (571)272-1791. The examiner can normally be reached on Monday-Friday 9:00am - 6:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Loke, can be reached on (571)272-1657. The fax numbers for all communication(s) is (571)273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-1625.

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A handwritten signature in black ink, appearing to read "Dao", with a long horizontal line extending to the right.

Dao H. Nguyen

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November 06, 2007